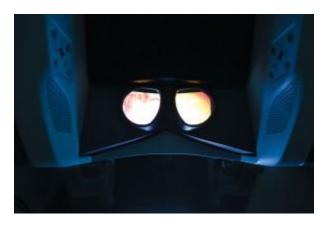
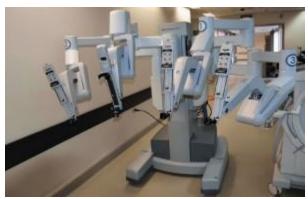
Dr. Octopus? Tripler's new surgeon is 'Star Wars' technology now

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Hide your trick or treat candy!
Tripler's Da Vinci Surgical Robot (above and right)
can utilize its "arms" to perform complicated surgical
methods with ease. This technology is comparable to
any larger treatment facility throughout the island or
mainland.

Story and photos by Jim Goose Guzior

Tripler Army Medical Center Public Affairs

HONOLULU — They don't just come out for Halloween; Tripler Army Medical Center's robot surgery section remains on the cutting edge of surgical treatments.

While the center has been using the Da Vinci Robot Surgical System for a number of years, within the last year, the center acquired the latest model of the Da Vinci Surgical System.

This equipment is comparable to what is used in any larger hospital or medical center in the mainland or around the globe.



TAMC perioperative nurse, 1st Lt. Daniel A. Reyna, positions the Da Vinci Robot for an actual surgery. In the background of the operating room, resident doctors, students and interns view the procedures for setting up the system. Currently, two or more surgeries a day are performed with the Da Vinci Robot Surgical System.

Versatile tool

This state-of-the-art robotic surgical equipment is used for performing routine and complex surgery. The robotics has allowed surgeons to perform minimally invasive surgery that ultimately translates into quicker recovery time, less scarring in patients and better quality of life.

Unlike traditional surgery, where an operating room staff hovers around the surgery table, during "robotic" surgical procedures, the surgeon sits at a console and looks through a 3-D viewfinder at a high definition image of the patient.



Dr. John H. Payne, TAMC general surgeon, controls the Da Vinci Robot remotely while viewing the actual surgery in 3-D. A duplicate system is set up in the surgery room to train residents on this technology.

As the surgeon maneuvers the controls, the robot translates the movement of the hand into precise movements of tiny instruments inside the body. Without this equipment, accessing certain body parts can be very difficult.

Lt. Col. Jay Schuster, a Tripler registered nurse and perioperative nursing consultant to the Army surgeon general, works with the robotic equipment daily and has seen the technology evolve through the years.

"This is really a proprietary system that allows for greater enhanced access to areas that human hands can't actually get to, so it has improved articulation and improved perspective that allows for more complicated procedures that would take a longer period of time or require enhanced dissection," Schuster explained. "It is a much more user-friendly system with better articulation that can do far, far, far better than anything the human hand can anatomically do – so 360 on 360, a circle in a circle," he added.



Tripler's Da Vinci Surgical Robot's "arms" perform complicated surgical methods that can reduce the size of most surgical incisions that translate into quicker recovery times.

Fine motor skills

With Tripler's focus on quality care for patients, the robot advantage is not for surgeons alone. Just as important, if not more so, are the advantages for patients. The minimally invasive surgery option eliminates the possibility of large scars. In fact, most procedures for patients are performed through just a few small incisions, about 1-2 centimeters in diameter. Most open surgeries would require much longer incisions that translate to longer recovery times.

"Take, for example, a patient with throat cancer. To access the tumor would require a long incision through the jaw and throat, and perhaps even a break in the jawbone, causing possible disfigurement, difficulty eating, speaking and swallowing," said Schuster. "Using the Da Vinci, small area surgery, such as throat surgery, is much easier to perform. The arms of the Da Vinci allow an entire 360-degree articulation, which your wrist just can't do. After making that entire

circle, the Da Vinci can then make another circle ... so a circle in a circle. The human wrist is not capable of making that kind of maneuver," he added.

One of the most important messages to beneficiaries deciding upon surgical care is that you no longer have to look to mainland clinics or go out of Tripler's treatment system for their specialty surgery. Patients can have it all done at TAMC.

"The state-of-the-art technologies that are available to you downtown are also available to you here. We have the latest and the greatest, so if you are a qualifying beneficiary, we can do it here," said Schuster. "We have some of the highest numbers of trained surgeons here, and we span all the services from obstetrics to oncology, ear-nose-throat, general surgery, bariatrics and geriatrics," he added.

The center is performing two or more surgeries a day using the Da Vinci Robot, but more are expected. The center is also a training environment where young residents have an opportunity to learn the technology and use it alongside the physician.

Almost like taking a driver test, the physician can put the brakes on any wrong move a resident may make while learning the technology.

"Twenty years ago, gall bladder and splenectomies were all open procedures. Nowadays, it would be unusual to see an open surgery (at TAMC). It's becoming the new norm," Schuster said.